\$%^STN;HighlightOn= \*\*\*;HighlightOff=\*\*\* ; Connecting via Winsock to STN Welcome to STN International! Enter x:x LOGINID:ssspta1756mja PASSWORD: TERMINAL (ENTER 1, 2, 3, OR ?):2 Welcome to STN International Web Page URLs for STN Seminar Schedule - N. America NEWS 1 NEWS 2 "Ask CAS" for self-help around the clock NEWS 3 JUL 20 Powerful new interactive analysis and visualization software, STN AnaVist, now available AUG 11 Derwent World Patents Index(R) web-based training during NEWS August NEWS 5 AUG 11 STN AnaVist workshops to be held in North America NEWS 6 AUG 30 CA/Caplus -Increased access to 19th century research documents NEWS 7 AUG 30 CASREACT - Enhanced with displayable reaction conditions NEWS 8 SEP 09 ACD predicted properties enhanced in REGISTRY/ZREGISTRY JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT NEWS EXPRESS MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005 NEWS HOURS STN Operating Hours Plus Help Desk Availability NEWS INTER General Internet Information NEWS LOGIN Welcome Banner and News Items NEWS PHONE Direct Dial and Telecommunication Network Access to STN NEWS WWW CAS World Wide Web Site (general information) Enter NEWS followed by the item number or name to see news on that specific topic. All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

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FILE COVERS 1907 - 20 Sep 2005 VOL 143 ISS 13
FILE LAST UPDATED: 19 Sep 2005
                              (20050919/ED)
New CAS Information Use Policies, enter HELP USAGETERMS for details.
  This file contains CAS Registry Numbers for easy and accurate
  substance identification.
=> s (settachayanon, ?)/au or (schnoes, ?)/au
            0 (SETTACHAYANON, ?)/AU
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L1
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          341 (SETTHACHAYANON, ?)/AU OR (SCHNOES, ?)/AU
=> s (isocyanate1 or diisocyanate or urethane or polyurethane) and 12
1 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
=> s (isocyanate or diisocyanate or urethane or polyurethane) and 12
        62004 ISOCYANATE
        21037 ISOCYANATES
        70187 ISOCYANATE
                (ISOCYANATE OR ISOCYANATES)
        45666 DIISOCYANATE
        10532 DIISOCYANATES
        49527 DIISOCYANATE
                (DIISOCYANATE OR DIISOCYANATES)
       112922 URETHANE
         5166 URETHANES
       114520 URETHANE
                (URETHANE OR URETHANES)
       114907 POLYURETHANE
        82962 POLYURETHANES
       137222 POLYURETHANE
                (POLYURETHANE OR POLYURETHANES)
           10 (ISOCYANATE OR DIISOCYANATE OR URETHANE OR POLYURETHANE) AND L2
L3
=> d all 1-10
L3
    ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
AN
    2003:1005091 CAPLUS
    140:10683
DN
    Entered STN: 25 Dec 2003
ED
    Optical article and process for forming article
TI
    Dhar, Lisa; Hale, Arturo; Katz, Howard Edan; Schilling, Marcia Lea;
IN
      ***Schnoes, Melinda Lamont***
PΑ
    Inphase Technologies, USA
SO
    U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of U.S. Ser. No. 46,822.
    CODEN: USXXCO
DТ
    Patent
LA
    English
    ICM G03H001-02
IC
INCL 430001000; 430002000; 430290000; 430280100; 359003000
    74-9 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
    Section cross-reference(s): 35, 38
FAN.CNT 2
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                        KIND
                               DATE
                                          APPLICATION NO.
                                                                DATE
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                        A1
                               20021003
    US 2002142227
                                          US 2002-115392
                                                                 20020403
    US 6939648
                        B2
                               20050906
PRAI US 1998-46822
                         A2
                               19980324
CLASS
              CLASS PATENT FAMILY CLASSIFICATION CODES
PATENT NO.
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G03H001-02

US 2002142227 ICM

430001000; 430002000; 430290000; 430280100; 359003000 INCL US 2002142227 NCL430/001.000 ECLA G03F007/00B3 The optical article of the invention, e.g., holog. recording medium or AΒ polymeric waveguide, is formed by mixing a matrix precursor and a photoactive monomer, and curing the mixt. to form the matrix in situ. The reaction by which the matrix precursor is polymd. during the cure is independent from the reaction by which the photoactive monomer is polymd. during writing of data. In addn., the matrix polymer and the polymer resulting from polymn. of the photoactive monomer are compatible with each other. Use of a matrix precursor and photoactive monomer that polymerize by independent reactions substantially prevents cross-reaction between the photoactive monomer and the matrix precursor during the cure and inhibition of subsequent monomer polymn. Use of a matrix precursor and photoactive monomer that result in compatible polymers substantially avoids phase sepn. And in situ formation allows fabrication of articles with desirable thicknesses. ST holog optical information storage polymer matrix IT Polyoxyalkylenes, preparation RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) ( \*\*\*diisocyanate\*\*\* terminated, polymer with dihydroxypolypropylene glycol and chlorophenyl acrylate, cured; holog. optical recording article and process for forming article) TТ Holography (holog. optical recording article and process for forming article) IT Polyoxyalkylenes, preparation RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polymer with \*\*\*diisocyanate\*\*\* terminated polypropylene glycol and chlorophenyl acrylate, cured; holog. optical recording article and process for forming article) \*\*\*Polyurethanes\*\*\* , preparation IT RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyoxyalkylene-, cross-linked; holog. optical recording article and process for forming article) IT Information systems (storage; holog. optical recording article and process for forming article) TТ 13633-87-9DP, 4-Chlorophenyl acrylate, polymer with \*\*\*diisocyanate\*\*\* terminated polypropylene glycol and dihydroxypolypropylene glycol, cured 25322-69-4DP, Polypropylene glycol, \*\*\*diisocyanate\*\*\* terminated, polymer with dihydroxypolypropylene glycol and chlorophenyl acrylate, 25322-69-4DP, Polypropylene glycol, polymer with \*\*\*diisocyanate\*\*\* terminated polypropylene glycol and chlorophenyl acrylate, cured 608525-53-7P, Pentaerythritol tetrakis (mercaptopropionate) -polypropylene glycol diglycidyl ether-styrene 608525-55-9P 608525-54-8P 608525-56-0P 608525-57-1P RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (holog. optical recording article and process for forming article) IT 90-11-9, 1-Bromonaphthalene 90-14-2, 1-Iodonaphthalene 627-31-6, 1,3-Diiodopropane 10075-72-6, 1-Methylthio naphthalene RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. or photoactive monomer for holog. optical recording article)

IT 38066-89-6P 111220-26-9P 244301-23-3P 244301-24-4P 244301-25-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. or photoactive monomer for holog. optical recording article)

- L3 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN AN 2003:972367 CAPLUS
- DN 140:33675
- ED Entered STN: 14 Dec 2003
- TI Holographic data storage media comprising an aluminum salt compound and an asymmetric acrylate compound
- IN \*\*\*Setthachayanon, Songvit\*\*\* ; Phan, Xuan T.; Michaels, Mark David;
  Ihas, Benjamin C.
- PA Inphase Technologies, Inc., USA
- SO PCT Int. Appl., 44 pp. CODEN: PIXXD2

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IC
     ICM G11C013-04
     ICS G03F007-004
CC
     74-8 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
    Section cross-reference(s): 38
FAN.CNT 1
     PATENT NO.
                                          APPLICATION NO.
                        KIND DATE
                                                                DATE
    WO 2003102959 A1 20031211 WO 2003-US17011 20030529
PΤ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
            TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                        A1 20050223 EP 2003-756276 20030529
     EP 1508144
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                    P 20020529
PRAI US 2002-383608P
     WO 2003-US17011
                       W
                              20030529
CLASS
              CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
               _____
 _____
 WO 2003102959 ICM
                       G11C013-04
               ICS
                       G03F007-004
                       G03F007/00B3; G03F007/027; G11C013/04C8
WO 2003102959 ECLA
os
    MARPAT 140:33675
AB
    A novel photoimaging system for a two-chem. system contg. liq.
     photoreactive asym. acrylate compd. contg. sulfur, arom. moieties, and
     optionally bromine, and an aluminum salt compd. is disclosed. The
     photoimaging system has high dynamic range (M/#) and sensitivity and
     unexpectedly high temp. and high humidity resistance. The photoimaging
     system retains its dynamic range when exposed to 60.degree.C for 4 wk
     while a compn. without the aluminum salt compd. lost 75% of its dynamic
     range under similar exposure conditions. In one embodiment, 2-10 % of a
    thiobutylacrylate dissolved in a two-component ***urethane*** matrix
     contg. 0.002-1 % of the aluminum salt compd. showed a dynamic range of
     greater than 5 for a 200 .mu. thick sample and retained more than 80% of
     the dynamic range after 4 wk exposure at 60.degree.C.
ST
     holog data storage media aluminum salt compd asym acrylate
ΙT
     Holographic recording materials
     Optical recording
        (holog. data storage media comprising aluminum salt compd. and asym.
       acrylate compd.)
                                  106-53-6, 4-Bromophenylthiol
IT
     91-60-1, 2-Naphthalenethiol
     Acryloyl chloride 865-47-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (holog. data storage media comprising aluminum salt compd. and asym.
       acrylate compd.)
IT
     630131-13-4P
                   632331-78-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or
     engineered material use); PREP (Preparation); RACT (Reactant or reagent);
     USES (Uses)
        (holog. data storage media comprising aluminum salt compd. and asym.
       acrylate compd.)
                   632331-79-4P
IT
     630131-12-3P
    RL: SPN (Synthetic preparation); TEM (Technical or engineered material
    use); PREP (Preparation); USES (Uses)
        (holog. data storage media comprising aluminum salt compd. and asym.
       acrylate compd.)
ΙT
     52292-18-9, Baytec WE-180
                              116243-07-3, Desmodur N3200
     RL: TEM (Technical or engineered material use); USES (Uses)
        (holog. data storage media comprising aluminum salt compd. and asym.
       acrylate compd.)
RE.CNT
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
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DT

LA

RE

Patent

English

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(1) Lee, C; US 5665791 A 1997 CAPLUS
(2) Lucent Technologies Inc; EP 0938027 A 1999 CAPLUS
(3) Mead Corp; EP 0435489 A 1991 CAPLUS
L3
     ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
    2003:950572 CAPLUS
AN
DN
    140:21315
ED
     Entered STN: 07 Dec 2003
    Novel exceptional high reflective index photoactive compound for optical
ΤI
    applications
       ***Setthachayanon, Songvit*** ; Phan, Xuan T.; Michaels, Mark David;
IN
     Ihas, Benjamin C.
    USA
PA
     U.S. Pat. Appl. Publ., 12 pp.
SO
     CODEN: USXXCO
DT
     Patent
LA
     English
     ICM G03H001-04
IC
         G11B007-24; G03F007-004; G03H001-10; C07C069-74; C07C319-00;
          C07C321-00; C07C323-00; C07C381-00
INCL 430001000; 430002000; 430270140; 430280100; 430284100; 359010000;
     560001000; 568039000
     74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other
CC
     Reprographic Processes)
FAN.CNT 1
                        KIND
                               DATE
                                          APPLICATION NO.
                                                                 DATE
     PATENT NO.
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                                           -----
                               20031204
                                           US 2003-446772
                                                                  20030529
PΙ
     US 2003224250
                         A1
                         A1
                               20031211
                                          WO 2003-US17010
                                                                 20030529
     WO 2003102693
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
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             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                               20020529
PRAI US 2002-383607P
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 US 2003224250
                 ICM
                       G03H001-04
                 ICS
                       G11B007-24; G03F007-004; G03H001-10; C07C069-74;
                       C07C319-00; C07C321-00; C07C323-00; C07C381-00
                       430001000; 430002000; 430270140; 430280100; 430284100;
                 INCL
                       359010000; 560001000; 568039000
 US 2003224250.
                 NCL
                       430/001.000
                       C08F020/38; G03F007/00B3; G03F007/027
                 ECLA
                       C08F020/38; G03F007/00B3; G03F007/027
 WO 2003102693
                 ECLA
OS
     MARPAT 140:21315
     A novel liq. photoreactive asym. acrylate compd. contg. sulfur, arom.
AB
     moieties, and optionally bromine, and having high dynamic range
     sensitivity is disclosed. The acrylate compd. is a monomer for a
     photoimaging system. In one embodiment, when about 2-8% by wt. of the
                                                      ***urethane***
     acrylate compd. is dissolved in a two-component
     system and incorporated in an optical article formed by reacting the
                    ***urethane***
                                    matrix system, the optical article shows
     a sensitivity of about 4 or more and a shrinkage during the formation of
     the optical article of about 0.05% vs. a sensitivity of 2.26 and a
     shrinkage of 0.13% when tribromophenyl acrylate, a com. monomer, was used.
     high reflective index photoactive compd holog optical recording
ST
IT
     Polymerization
        (cationic; prepn. of novel exceptional high reflective index
        photoactive compd. for holog. recording)
ΙT
     Holography
        (novel exceptional high reflective index photoactive compd. for)
IT
     Optical recording materials
        (novel exceptional high reflective index photoactive compd. for holog.
        recording)
IT
     630131-11-2P
                    630131-12-3P
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RL: SPN (Synthetic preparation); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (novel exceptional high reflective index photoactive compd. for holog.
       recording)
                                  106-53-6, 4-Bromophenylthiol
     91-60-1, 2-Naphthalenethiol
     19398-47-1, 1,4-Dibromo-2-butanol
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of novel exceptional high reflective index photoactive compd.
       for holog. recording)
     630131-13-4P
                   630131-14-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (prepn. of novel exceptional high reflective index photoactive compd.
       for holog. recording)
    ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
     2003:133327 CAPLUS
     138:171420
     Entered STN: 21 Feb 2003
    Process and composition for rapid mass production of holographic recording
     article from
                  ***polyurethane*** precursors
      ***Setthachayanon, Songvit*** ;
                                       ***Schnoes, Melinda***
     Inphase Technologies, Inc., USA
     PCT Int. Appl., 39 pp.
    CODEN: PIXXD2
     Patent
     English
    ICM C08G018-10
     ICS G11B007-26; G03H001-00
     38-3 (Plastics Fabrication and Uses)
     Section cross-reference(s): 73
FAN.CNT 1
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     PATENT NO.
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                             DATE
                                                                 DATE
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                                        WO 2002-US24926
    WO 2003014178
                                                                20020807
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            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
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            TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
            CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
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    US 2003044691
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                                        US 2002-146115
                        A1
                                                                 20020516
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                              20040506
    EP 1414878
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                                                                 20020807
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            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
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                               20041216
                                          JP 2003-519124
                                                                 20020807
     JP 2004537620
PRAI US 2001-310225P
                        Р
                               20010807
                               20020516
    US 2002-146115
                        А
    WO 2002-US24926
                        W
                               20020807
CLASS
PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
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                ICM
                       C08G018-10
WO 2003014178
                ICS
                       G11B007-26; G03H001-00
                ECLA
                       C08G018/10+18/48; G02B006/122C; G03H001/02;
WO 2003014178
                       G11B007/0065; G11B007/26; G11C013/04C
                NCL
US 2003044691
                       430/001.000
                ECLA
                       C08G018/10+18/48; G02B006/122C; G03H001/02;
                       G11B007/0065; G11B007/26; G11C013/04C
EP 1414878
                ECLA
                       C08G018/10+18/48; G02B006/122C; G03H001/02;
                       G11B007/0065; G11B007/26; G11C013/04C
                       2K008/AA04; 2K008/DD12; 2K008/DD13; 2K008/FF17;
JP 2004537620
                FTERM
                       4J034/DA01; 4J034/DG04; 4J034/DG06; 4J034/HA01;
                       4J034/HA07; 4J034/HB08; 4J034/HC03; 4J034/HC12;
                       4J034/HC34; 4J034/HC35; 4J034/HC64; 4J034/HC67;
                       4J034/HC71; 4J034/JA42; 4J034/MA12; 4J034/MA18;
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IT

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IN PA

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4J034/RA13; 4J034/RA16
     An optical article comprising a photoactive material and a polymer matrix
    is formed by a polymg. reaction of a material comprising component 1 and
     component 2, component 1 comprising a NCO-terminated pre-polymer and the
     component 2 comprising a polyol; wherein the material has an exotherm peak
     occurring within 12 min after mixing the component 1 and the component 2.
    Rapid mass prodn. of high performance holog. recording articles is
    described. To prep. a high performance holog. recording article based on
     two-component
                    ***urethane***
                                     matrix system, for example, polyols and
     all the additives must be virtually free of moisture contents. Deaeration
                               ***isocyanate*** and polyols including
     must be carried out, once
     catalysts and all other ingredients are mixed together, to eliminate all
     entrapped air that is introduced into the mixt. during mixing. The
     deaeration takes time, and the ***urethane*** reaction must not be
     allowed to take place until all air bubbles are evacuated from the
       ***isocyanate*** -polyols mixt. The rapid mass prodn. of this invention
     overcomes such process limitations and results in a high-vol. prodn. of
     the high performance holog. recording articles.
ST
       ***polyurethane***
                          precursor holog recording material
IT
     Holographic recording materials
    Optical materials
     Optical waveguides
     Polymerization
        (process and compn. for rapid mass prodn. of holog. recording article
              ***polyurethane*** precursors)
ΙT
     Polyoxyalkylenes, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (triols, ***polyurethanes*** ; process and compn. for rapid mass
       prodn. of holog. recording article from ***polyurethane***
       precursors)
     9048-57-1DP, Baytec MP 160,
                                 ***polyurethanes***
IT
                                                       with polyoxypropylene
             25190-06-1DP, Polytetramethylene glycol, ***polyurethanes***
    triols
     52292-18-9DP, Baytec WE 180, ***polyurethanes*** with polyoxypropylene
     triols 116243-07-3DP, Desmodur N3200, ***polyurethanes*** with
     polyoxypropylene triols 151438-81-2P, Mondur TD 168256-05-1DP, Mondur
          ***polyurethanes*** with polyoxypropylene triols
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (process and compn. for rapid mass prodn. of holog. recording article
        from ***polyurethane*** precursors)
IT
     25322-69-4D, Polypropylene Oxide, triols,
                                                ***polyurethanes***
     52794-68-0, Tribromophenylacrylate
     RL: TEM (Technical or engineered material use); USES (Uses)
        (process and compn. for rapid mass prodn. of holog. recording article
        from ***polyurethane*** precursors)
RE.CNT 3
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Canon; JP 02078033 A 1990 CAPLUS
(2) Dainippon Printing; JP 05323850 A 1993 CAPLUS
(3) Joseph; US 5959775 A 1999
    ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
L3
AN
    1999:631477 CAPLUS
DN
    131:250476
ED
    Entered STN: 06 Oct 1999
TТ
    Optical article and process for forming article
TN
    Dhar, Lisa; Hale, Arturo; Katz, Howard Edan; Schilling, Marcia Lea;
      ***Schnoes, Melinda Lamont***
PA
    Lucent Technologies Inc., USA
SO
    Eur. Pat. Appl., 16 pp.
    CODEN: EPXXDW
DT
    Patent
LA
    English
TC
    ICM G03F007-00
     ICS G03H001-02; G03F007-20
    74-8 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
    Section cross-reference(s): 73
FAN.CNT 2
    PATENT NO.
                        KIND
                               DATE
                                         APPLICATION NO.
                                                                 DATE
                               -----
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    EP 945762
                         A1
                               19990929
                                          EP 1999-302010
                                                                  19990316
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
    JP 11352303
                                           JP 1999-79043
                         A2
                               19991224
                                                                  19990324
PRAI US 1998-46822
                         Α
                               19980324
    US 1998-208557
                         Α
                               19981209
CLASS
PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
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                       ______
EP 945762
                ICM
                       G03F007-00
                ICS
                       G03H001-02; G03F007-20
EP 945762
                ECLA
                       G03F007/00B3
AB
    The optical article of the invention, e.g., a holog. recording medium or
     polymeric waveguide, is formed by mixing a matrix precursor and a
    photoactive monomer and curing the mixt. to form the matrix in situ.
     reaction by which the matrix precursor is polymd. during the cure is
     independent from the reaction by which the photoactive monomer is polymd.
     during writing of data. In addn., the matrix polymer and the polymer
     resulting from polymn. of the photoactive monomer are compatible with each
     other. The use of a matrix precursor and a photoactive monomer that
     polymerize by independent reactions substantially prevents cross-reaction
     between the photoactive monomer and the matrix precursor during the cure
     and inhibition of subsequent monomer polymn. The use of a matrix
     precursor and a photoactive monomer that result in compatible polymers
     substantially avoids phase sepn. And in situ formation allows fabrication
     of articles with desirable thicknesses.
     optical article independent matrix polymn monomer photopolymn; hologram
ST
     independent matrix polymn monomer photopolymn
_{
m IT}
     Polyoxyalkylenes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
          ***diisocyanate*** -terminated; photopolymerizable compns. for
       holog. and optical article fabrication contg.)
IT
     Polyoxyalkylenes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (photopolymerizable compns. for holog. and optical article fabrication
        contg.)
     Holography
        (photopolymerizable compns. with polymerizable matrix precursors for)
IT
     Optical instruments
     Optical wavequides
        (photopolymerizable compns. with polymerizable matrix precursors for
        fabrication of)
     Photoimaging materials
        (photopolymerizable; with polymerizable matrix precursors for optical
        article fabrication)
IT
              100-42-5, uses
                               2039-82-9, 4-Bromostyrene
                                                           6674-22-2
     7575-23-7, Pentaerythritoltetrakis(mercaptopropionate) 13633-87-9,
     4-Chlorophenyl acrylate 25322-69-4 25322-69-4D, Polypropylene glycol,
       ***diisocyanate*** -terminated 26142-30-3, Polypropylene glycol
     diglycidyl ether
                      125051-32-3
     RL: TEM (Technical or engineered material use); USES (Uses)
        (photopolymerizable compns. for holog. and optical article fabrication
     10075-72-6P, 1-Methylthionaphthalene
                                           38066-89-6P
                                                         111220-26-9P
     244301-25-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (prepn. and reaction in prepg. photoactive monomer for
        photopolymerizable compns. for holog. and optical article fabrication)
     244301-23-3P
                   244301-24-4P
     RL: SPN (Synthetic preparation); TEM (Technical or engineered material
    use); PREP (Preparation); USES (Uses)
        (prepn. and use as photoactive monomer for photopolymerizable compns.
        for holog. and optical article fabrication)
IT
     90-11-9, 1-Bromonaphthalene 90-14-2, 1-Iodonaphthalene 624-92-0,
                         627-31-6, 1,3-Diiodopropane
     Dimethyl disulfide
                                                      1779-49-3,
     Methyltriphenylphosphonium bromide
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction in prepg. photoactive monomer for photopolymerizable compns.
        for holog. and optical article fabrication)
RE.CNT
             THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Du Pont; EP 0407773 A 1991
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(2) Essilor Int; FR 2667073 A 1992 CAPLUS
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- (3) Lucent Technologies Inc; EP 0824222 A 1998 CAPLUS
- (4) Masami, K; US 5665494 A 1997 CAPLUS
- (5) Nihon Ita Glass Kk; JP 58163903 A 1983(6) Nihon Ita Glass Kk; JP 59071004 A 1984
- (7) Tateishi Denki Kk; JP 60072927 A 1985 CAPLUS

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L3 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
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AN 1997:603219 CAPLUS

DN 127:222000

ED Entered STN: 24 Sep 1997

TI \*\*\*Polyurethane\*\*\* (meth)acrylate, its manufacture, coating compositions, and wear layers for floor coverings

DATE

IN Rosenberry, Angela S.; Rupp, Claude R.; \*\*\*Setthachayanon, Songvit\*\*\*

PA Armstrong World Industries Inc, USA

SO Brit. UK Pat. Appl., 34 pp.

CODEN: BAXXDU

DT Patent

LA English

IC ICM C08G018-67

ICS C09D175-16

CC 42-10 (Coatings, Inks, and Related Products)

KIND

FAN.CNT 1
PATENT NO.

| DT   | GD 0207012  |        | 7.1      | 10070611     | GD 1006 25000                                    | 10061000  |
|------|-------------|--------|----------|--------------|--|-----------|
| ΡI   | GB 2307912  |        | A1       | 19970611     | GB 1996-25099                                    | 19961203  |
|      | GB 2307912  |        | B2       | 19991208     |  |           |
|      | CA 2189836  |        | AA       | 19970605     | CA 1996-2189836                                  | 19961107  |
|      | CA 2189836  |        | С        | 20040525     |  |           |
|      | EP 783008   |        | A2       | 19970709     | EP 1996-118484                                   | 19961118  |
|      | EP 783008   |        | A3       | 19980114     |  |           |
|      | EP 783008   |        | B1       | 20040211     |  |           |
|      | R: BE,      | DE, FR | , LU, NI | , SE         |  |           |
|      | US 5719227  | ·      | A        | 19980217     | US 1997-853277                                   | 19970509  |
|      | US 5843576  |        | A        | 19981201     | US 1997-963176                                   | 19971103  |
| PRAI | US 1995-566 | 545    | A        | 19951204     |  |           |
|      | US 1997-853 | 277    | A3       | 19970509     |  |           |
| CLAS | S           |        |          |              |  |           |
|      | ENT NO.     | CLASS  | PATENT   | FAMILY CLASS | SIFICATION CODES                                 |           |
|      |             |        |          |              |  |           |
| GB   | 2307912     | ICM    | C08G018  | 8-67         |  |           |
| .05  | 2307312     | ICS    | C09D175  | -            |  |           |
| an.  | 2207012     |        |          |              | 7010/6774:10/40 00000                            | 10/50545  |
| GB   | 2307912     | ECLA   |          |              | G018/67B4+18/42; C08G0                           |           |
|      |             |        |          |              | 3018/79D4; C08G018/79K                           | •         |
| ED   | 783008      | ECLA   |          | R/67B4+18/42 | <ul> <li>C08G018/67B4D</li> <li>C08G0</li> </ul> | 18/78B4F+ |

EP 783008 ECLA C08G018/67B4+18/42; C08G018/67B4D; C08G018/78B4F; C08G018/78B4K; C08G018/79D4; C08G018/79K; C09D175/16 US 5719227 NCL 524/590.000; 522/012.000; 522/021.000; 522/090.000; 522/096.000; 525/455.000; 528/075.000 ECLA C08G018/67B4+18/42; C08G018/78B4F; C08G018/78B4K; C08G018/79D4; C08G018/79K; C09D175/16 US 5843576 NCL 428/423.100; 522/012.000; 522/021.000; 522/090.000; 522/096.000; 524/590.000; 525/123.000; 525/455.000; 528/075.000

ECLA C08G018/67B4+18/42; C08G018/78B4F; C08G018/78B4K; C08G018/79D4; C08G018/79K; C09D175/16

APPLICATION NO.

DATE

AB The multifunctional \*\*\*polyurethane\*\*\* (meth)acrylate oligomer is made by reacting a polyisocyanate with a functionality .gtoreq.3, a polyester polyol, and a hydroxyalkyl (meth)acrylate of mol. wt. .apprx.116-600. The coating compn. preferably includes a reactive (meth)acrylate diluent and a photoinitiator. Thus, a compn. contg. SR 351 diluent 16, SR 499 diluent 10, SR 502 10, Tone M 100 32.58, 1,6-hexanediol-glycerin-phthalic anhydride copolymer 8.87, and Desmodur N 3300 22.55 parts and photoinitiator was stable (70.degree. was stable >6 mo. as liq.) and was applied onto vinyl tile base and UV cured to give a coating having good stain resistance, gloss retention and scratch resistance.

\*\*\*polyurethane\*\*\* acrylate coating floor covering; polyester polyol
\*\*\*urethane\*\*\* acrylate coating; hydroxyalkyl acrylate \*\*\*urethane\*\*\*
coating; wear layer floor covering; isocyanurate trimer

\*\*\*polyurethane\*\*\* acrylate coating; biuret \*\*\*isocyanate\*\*\*

\*\*\*polyurethane\*\*\* acrylate coating; branched \*\*\*polyurethane\*\*\*
acrylate coating

IT \*\*\*Polyurethanes\*\*\* , uses

ST

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RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (polyester-, acrylates; radiation curable coatings of superior gloss
        retention, abrasion, and stain resistance for floor coverings)
     Floor coverings
                             ***polvurethane***
        (radiation curable
                                                   acrylate coatings of superior
        gloss retention, abrasion, and stain resistance for)
     Coating materials
        (radiation-curable; radiation curable
                                                 ***polyurethane***
                                                                       acrvlate
        coatings of superior gloss retention, abrasion, and stain resistance
        for)
     5124-30-1DP, Methylene bis(4-cyclohexylisocyanate), isocyanurate derivs.,
     polymer with reactive diluent, polyester polyol, and hydroxyacrylate
     15625-89-5DP, SR 351, polymer with polyester polyol, hydroxyacrylate and
     allophanate or isocyanurate 28961-43-5DP, Sartomer 499, polymer with
     polyester polyol, hydroxyacrylate and allophanate or isocyanurate
     75454-89-6DP, 1,6-Hexanediol-glycerin-phthalic anhydride copolymer,
     polymer with reactive diluent and hydroxyacrylate and allophanate or
     isocyanurate 101484-78-0DP, Tone M 100, polymer with reactive diluent
     and polyester polyol and allophanate or isocyanurate
                                                            194798-53-3P
                    194798-55-5P 194798-56-6P 194798-57-7P
     194798-54-4P
                                                                  194798-58-8P
     194798-59-9P
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (radiation curable coatings of superior gloss retention, abrasion, and
        stain resistance for floor coverings)
     ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
     1996:535064 CAPLUS
     125:224751
     Entered STN: 07 Sep 1996
     (Meth) acrylated aromatic polyester floor covering wear layer
     Ehrhart, Wendell A.; ***Setthachayanon, Songvit***
     Armstrong World Industries, Inc., USA
     U.S., 6 pp., Cont. of U.S. Ser. No. 223, 760, abandoned.
     CODEN: USXXAM
     Patent
     English
     ICM C08L067-07
INCL 428482000
     42-11 (Coatings, Inks, and Related Products)
FAN.CNT 1
                        KIND DATE
                                           APPLICATION NO.
     PATENT NO.
                                                                DATE
PI US 5543232 A 19960806 US 1995-418873 19950406
    US 5663003 A 19970902 US 1996-644207 19960510
    US 5891582 A 19990406 US 1997-885503 19970630

PRAI US 1994-223760 B1 19940406
    US 1995-418873 A1 19950406
    US 1996-644207 A1 19960510
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
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                 ____
                ICM
 US 5543232
                        C08L067-07
                 INCL
                        428482000
 US 5543232
                 NCL
                        428/482.000; 525/033.000; 525/170.000
                 ECLA
                        C09D167/07; E04F015/12
                        428/482.000; 525/010.000; 525/033.000; 525/035.000;
 US 5663003
                 NCL
                        525/170.000
                        C09D167/07; E04F015/12
                 ECLA
                        428/482.000; 525/010.000; 525/033.000; 525/035.000;
 US 5891582
                 NCL
                         525/170.000
                       C09D167/07; E04F015/12
                 ECLA
     Title resin compn. comprises an acrylated polyester, the polyester being
     the reaction product of an equiv. excess of diol, e.g. 1,6-hexanediol and
     an arom. polycarboxylic acid or anhydride, preferably trimellitic
     anhydride, and includes a highly ethoxylated triacrylate (for enhanced
     flexibility and gloss retention). These coatings have good gloss
     retention and better resistance to household and other stains than com.
       ***urethane*** /acrylate floor coverings. PVC panels were coated with a
     compn. contg. 1,4-cyclohexanedicarboxylic acid-1,6-hexanediol-trimellitic
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\*\*\*Polyurethanes\*\*\* , uses

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AB

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anhydride polyester acrylate (hydroxy no. 48.1) 70, SR 9035 30,
    methyldiethanolamine 0.23, benzophenone 3.0, 1-
    hydroxycyclohexylphenylketone 1.0 g, and DC-193 surfactant and were cured
    in 2 passes under N at 0.35 J/pass, using 200 W/in Hg vapor lamps to give
    films having 24 h household stain test (sum of .delta.E) 75 and 90 min
    modified Taber abrasion test value (gloss retention) 93%.
    clear coat no wax resilient floor; polyester acrylate clear wear layer
    floor; hexanediol polyester acrylate wear layer floor; trimellitic
    polyester acrylate wear layer floor; stain resistant polyester coating
    floor; photocurable polyester acrylate clear coating
        (wear layer for; (Meth) acrylated arom. polyester floor covering resin
       compn. having both good stain resistance and gloss retention)
    Polyesters, uses
    RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (acrylate-terminated, (Meth) acrylated arom. polyester floor covering
       resin compn. having both good stain resistance and gloss retention)
    Coating materials
        (glossy, stain-resistant; (Meth) acrylated arom. polyester floor
       covering resin compn. having both good stain resistance and gloss
       retention)
    181782-63-8P
                   181782-64-9P
                                  181782-65-0P
                                                 181782-66-1P
    RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        ((Meth) acrylated arom. polyester floor covering resin compn. having
       both good stain resistance and gloss retention)
    98125-30-5P, 1,6-Hexanediol-Trimellitic anhydride copolymer
    126982-13-6P, 1,6-Hexanediol-Trimesic acid copolymer
                                                           181517-79-3P
    181517-81-7P
    RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        ((Meth) acrylated arom. polyester floor covering resin compn. having
       both good stain resistance and gloss retention)
                                 181782-69-4P
                                                181782-70-7P
    181782-67-2P
                   181782-68-3P
    RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
    engineered material use); PREP (Preparation); USES (Uses)
        (coating having both good stain resistance and gloss retention)
     9002-86-2, PVC
    RL: MSC (Miscellaneous)
        (floor tile; (Meth) acrylated arom. polyester floor covering resin
        compn. having both good stain resistance and gloss retention)
    ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
    1992:540661 CAPLUS
    117:140661
    Entered STN: 04 Oct 1992
    UV-sensitive photoimaging composition for solder mask formation
       ***Setthachayanon, Songvit***
    Armstrong World Industries, Inc., USA
    U.S., 11 pp. Cont.-in-part of U.S. Ser. No. 256,638.
    CODEN: USXXAM
    Patent
    English
    ICM G03F007-028
     ICS G03F007-033
INCL 430284000
    74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 2
                     KIND
                                         APPLICATION NO.
                                                                 DATE
                               DATE
    PATENT NO.
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                                           ______
                               -----
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                       A 19920218 US 1989-365328 19890613
A 19920407 US 1988-256638 19881012
    US 5089376
US 5102774 A 19920407
PRAI US 1986-939604 B2 19861208
US 1987-45464 B1 19870504
US 1988-256638 A2 19881012
                              19920407
                                         US 1988-256638
CLASS
             CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
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US 5089376 ICM G03F007-028
                ICS
                       G03F007-033
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US 5089376
                 NCL
                        430/284.100; 430/910.000; 522/092.000; 522/095.000;
                        522/096.000; 522/097.000
 US 5102774
                 NCL
                        430/284.100; 522/097.000
AΒ
     A UV-sensitive photoimaging compn. for forming a solder mask comprises a
     polymer prepd. by condensation reaction of a ***diisocyanate*** , a
     hydroxyalkyl (di or tri)(meth)acrylate, and a carboxylic acid polyol, a
     binder resin, and a crosslinking agent, wherein the carboxylic acid polyol
     has the formula (OH) \times ZCO2H where x = an integer of 2-5; Z = a linear or
     branched, satd., unsatd., or arom. hydrocarbon moiety having 2-29 C atoms
     and a polyol and/or a dicarboxylic acid polyol can also be used as a
     reactant in the prepn. of the polymer.
     solder mask UV photoimaging compn;
                                         ***diisocyanate***
ST
                                                               polymer
     photosensitive solder mask
IT
       ***Urethane***
                       polymers, compounds
     RL: USES (Uses)
        (acrylates, carboxylated, UV-sensitive photopolymerizable compns.
        contg., for solder mask formation)
     Photoimaging compositions and processes
IT
        (photopolymerizable, UV-sensitive, contg. carboxylated ***urethane***
        acrylates for solder mask formation)
IT
     4986-89-4, Pentaerythritol tetraacrylate 9011-13-6, Maleic
     anhydride-styrene copolymer 10287-53-3, Ethyl p-dimethylaminobenzoate
     15625-89-5 24650-42-8, 2,2-Dimethoxy-2-phenylacetophenone 75081-21-9,
     Isopropylthioxanthone 129406-62-8, Novacure 3800
     RL: USES (Uses)
        (UV-sensitive photopolymerizable compns. contg. carboxylated
          ***urethane*** acrylates and, for solder mask formation)
                  118244-07-8 143385-43-7 143385-44-8
IT
     82400-41-7
                                                            143385-45-9
     143480-21-1
     RL: USES (Uses)
        (UV-sensitive photopolymerizable compns. contq. for solder mask
        formation)
     ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
L3
AN
     1989:25483 CAPLUS
DN
     110:25483
ED
     Entered STN: 21 Jan 1989
ΤI
     Photocurable ***urethane***
                                     (meth)acrylate solder resists
IN
       ***Setthachayanon, Songvit***
PA
     Armstrong World Industries, Inc., USA
SO
     Ger. Offen., 13 pp.
     CODEN: GWXXBX
DT
     Patent
LA
     German
IC
     ICM C08G018-34
     ICS C08L075-04; C09D003-72; C09D003-80; G03F007-10; H05K003-34
     C08J003-28; C09D003-74; C09D007-00; H05K003-28
TCA
     C08J003-24, C08L075-04
     42-10 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 74, 76
FAN.CNT 2
     PATENT NO.
                       KIND
                              DATE
                                           APPLICATION NO.
                                                                  DATE
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                               -----
                                            _______
                                                                   _____
PΙ
     DE 3741385
                        · A1
                               19880609
                                           DE 1987-3741385
                                                                  19871207
                       C2
     DE 3741385
                                19960605
                      A1 19940920
A 19880701
B 19940316
C 19940816
A1 19880610
     CA 1332093
                                           CA 1987-550900
                                                                   19871103
     NL 8702942
                                           NL 1987-2942
                                                                   19871207
     NL 190785
     NL 190785
     FR 2607820
                                           FR 1987-17087
                                                                   19871208
                        B1 19940610
     FR 2607820
                        Α
     CN 87107321
                              19880622
                                            CN 1987-107321
                                                                   19871208
                        В
     CN 1031227
                               19960306
                       A2
B4
     JP 63156870
                              19880629
                                            JP 1987-308828
                                                                   19871208
     JP 01041185
                               19890904
                        A1
                                19880706
     GB 2199335
                                            GB 1987-28631
                                                                   19871208
                       B2
A
                               19910109
     GB 2199335
     BR 8706609
                               19880719
                                            BR 1987-6609
                                                                   19871208
PRAI US 1986-939604 A
US 1987-45464 A
                              19920930
                                            CH 1987-4773
                                                                   19871208
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19861208 19870504

INCL

430284000

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PATENT NÔ.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
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 DE 3741385
                 TCM
                        C08G018-34
                 ICS
                        C08L075-04; C09D003-72; C09D003-80; G03F007-10;
                        H05K003-34
                 ICA
                        C08J003-28; C09D003-74; C09D007-00; H05K003-28
                        C08J003-24, C08L075-04
                 ICI
                 ECLA
 DE 3741385
                        C08F299/06; C08G018/34H; C08G018/67B4+18/08B6C;
                        C08G018/67B4D; G03F007/035
'FR 2607820
                 ECLA
                        C08F299/06; C08G018/34H; C08G018/67B4+18/08B6C;
                        C08G018/67B4D; G03F007/035
     The title resists, resistant to org. solvents but removable by alkalies,
AB
     contain polymers prepd. from ***diisocyanates***
                                                          30-80, carboxylic
     acids bearing 2-5 OH groups 5-45, and hydroxyalkyl di- or
     tri(meth)acrylates 5-50%. A ***polyurethane***
                                                        acrylate was prepd.
     from 1,6-hexanediol 4, dimethylolpropionic acid 4, 2-hydroxyethyl acrylate
     8.2, and trimethylhexamethylene ***diisocyanate*** 16 equiv in 784 g
     N-methylpyrrolidone (I) and mixed (77.5 g) with maleic anhydride-styrene
     copolymer iso-Bu ester 82.0, trimethylolpropane triacrylate 47.8,
     isopropylthioxanthone 6.5, p-Me2NC6H4CO2Et 8.4, antifoam 6.5,
     phenothiazine 0.004, green dye 9.0, and I 91.25 g. This compn. was coated
     on a Cu-plated epoxy resin board, dried, cured through a neg. by UV,
     developed with 1% aq. K2CO3, cured, and post-cured to give a
     CH2Cl2-resistant mask resisting molten solder (260-275.degree.).
     solder resist photocurable;
                                   ***polyurethane*** acrylate solder resist;
ST
     crosslinking agent solder resist; trimethylolpropane acrylate crosslinker;
     developer alkali solder resist
IT
       ***Urethane***
                        polymers, uses and miscellaneous
     RL: USES (Uses)
        (acrylate-terminated, solder resists, photocurable and
        alkali-removable)
IT
     Resists
        (photo-, solder,
                           ***polyurethane***
                                                acrylates as)
IT
        (resists, photocurable
                               ***polyurethane***
                                                      acrylates,
        alkali-removable)
IT
     58206-31-8
     RL: USES (Uses)
        (binders, Scripset 550, for photocurable solder resists)
     15625-89-5, Trimethylolpropane triacrylate
     RL: MOA (Modifier or additive use); USES (Uses)
                                    ***polyurethane***
        (crosslinking agents, for
                                                         acrylate solder
        resists, photocurable and alkali-removable)
     4098-71-9D, polymers with polycaprolactone triol, dimethylolpropionic acid
     and trimethylolpropane triacrylate
                                         4767-03-7D, polymers with IPDI,
     polycaprolactone triol and trimethylolpropane triacrylate
                                                                  24980-41-4D.
     Caprolactone polymer, triol derivs., polymers with IPDI,
     dimethylolpropionic acid, and trimethylolpropane triacrylate
     25248-42-4D, Polycaprolactone, SRU, triol derivs., polymers with IPDI,
     dimethylolpropionic acid, and trimethylolpropane triacrylate 118139-86-9
     118244-07-8
     RL: USES (Uses)
        (solder resists, photocurable and alkali-removable)
L3
     ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
     1987:534813 CAPLUS
AN
DN
     107:134813
     Entered STN: 17 Oct 1987
ED
TI
     Bicyclic acrylic monomers
     Herweh, John Edward; Echterling, Garry Kent; ***Setthachayanon, ***
IN
          Sonqvit***
PA
     Armstrong World Industries, Inc., USA
SO
     Ger. Offen., 7 pp.
     CODEN: GWXXBX
DT
     Patent
LA
     German
IC
     ICM C07D493-08
     ICS C08F020-36; C08G065-22; G03F007-10
TCA
     C08J003-28; C08J003-24
ICI
     C08G065-22, C08L071-00
CC
     35-2 (Chemistry of Synthetic High Polymers)
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CLASS

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Section cross-reference(s): 28
FAN.CNT 1
     PATENT NO.
                         KIND
                                             APPLICATION NO.
                                                                    DATE
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                                _____
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     DE 3637467
                                19870507
                                            DE 1986-3637467
                          A1
                                                                    19861104
                         A
                                                                    19861001
     US 4672098
                                19870609
                                            US 1986-912538
                       A1 1989062.
A 19870601
B 19900316
     CA 1256445
                                            CA 1986-520782
                                                                   19861017
     NL 8602723
                                           NL 1986-2723
                                                                    19861029
     NL 185922
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A1
                               19900816
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                              19870514
     AU 8664651
                                           AU 1986-64651
                                                                    19861103
     AU 586046
                          B2
                                19890629
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     BE 905691
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     FR 2589471
                        A1
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B1
C2
GB 2182661 A1
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US 1986-912538 A
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                        B1
                                19900302
                                19900419
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                               19870520
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                                                                    19861106
                               19891122
                               19870625
                                           JP 1986-262916
                                                                   19861106
                               19851106
                               19861001
              CLASS PATENT FAMILY CLASSIFICATION CODES
                 _ _ _ _
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                 ICM
                        C07D493-08
 DE 3637467
                 ICS
                        C08F020-36; C08G065-22; G03F007-10
                 ICA
                        C08J003-28; C08J003-24
                 ICI
                        C08G065-22, C08L071-00
                NCL
                        526/268.000; 522/169.000; 549/363.000
 US 4672098
GΙ
/ Structure 1 in file .gra /
           ***urethanes*** I (R1 = alkyl, aryl; R2 = H, Me; Z1 =
AB
     The
     hydrocarbylene; Z2 = alkylene; x = 0 or 1) are useful in the manuf. of
     (co)polymers. Adding 128.4 g 2-isocyanatoethyl methacrylate over 50 min
     to 144.2 g 1-ethyl-2,6,7-trioxabicyclo[2.2.2]octane-4-methanol and 1.4 g
     triethylenediamine in C6H6, adding 0.1 g hydroquinone, and heating 4 h at
     45-55.degree. gave 262.3 g ***urethane*** . AIBN-initiated photopolymn. of an 8.6% C6H6 soln. of this ***urethane*** gave a
     polymer (via the double bond only) with mol. wt. 50,532 (161,196 cor.) and
     glass temp. 84-99.degree..
     trioxatricycolooctanemethanol ***urethane*** methacrylate; ortho ester
st
       ***urethane*** methacrylate; isocyanatoethyl methacrylate reaction alc
     110259-22-8P 110259-23-9P 110415-25-3P
TT
     RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
         (manuf. and properties of)
IT
     110259-21-7P 110306-19-9P 110321-56-7P
     RL: PREP (Preparation)
         (prepn. of)
IT
     26471-62-5, TDI
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (reaction of, with Et trioxabicyclooctanemethanol and hydroxyethyl
        acrylate)
TT
     4098-71-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (reaction of, with Et trioxabicyclooctanemethanol and hydroxyethyl
        acrylate s)
     30674-80-7, Isocyanatoethylmethacrylate
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (reaction of, with Et trioxobicyclooctanemethanol)
IT
     818-61-1
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (reaction of, with ***diisocyanates***
        trioxabicyclooctanemethanol e)
IT
     74358-92-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
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(reaction of, with isocyanatoethyl methacrylate)

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(FILE 'HOME' ENTERED AT 08:21:50 ON 20 SEP 2005)

FILE 'CAPLUS' ENTERED AT 08:21:55 ON 20 SEP 2005

332 S (SETTACHAYANON, ?)/AU OR (SCHNOES, ?)/AU 341 S (SETTHACHAYANON, ?)/AU OR (SCHNOES, ?)/AU L2

10 S (ISOCYANATE OR DIISOCYANATE OR URETHANE OR POLYURETHANE) AND

=> log y

FULL ESTIMATED COST

COST IN U.S. DOLLARS SINCE FILE TOTAL

> ENTRY SESSION 46.62 46.83

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL

> ENTRY SESSION

CA SUBSCRIBER PRICE -7.30 -7.30

STN INTERNATIONAL LOGOFF AT 08:24:01 ON 20 SEP 2005